

WHAT IS CLAIMED IS:

1. A method of transmitting a plurality of policy rules, each of which describes a condition and an action, from a policy server to a network node that is connected to the policy server via a network, the method comprising the steps of:

assigning the plurality of policy rules with their identifiers;

transmitting the policy rules with their assigned identifier to said network node: and

detecting policy rules that depend on a newly entered policy rule or on any of which a newly entered policy rule depends when transmitting a new policy rule or rules to said network node as additional one or ones,

wherein, with regard to the policy rules that depend on a new policy rule or on any of which a new policy rule depends, detected by said detection step, if the policy rule has not been transmitted to said network node, the identifier thereof and the condition and action described therein are transmitted to said network node; if the policy rule has been transmitted to said network node, the identifier thereof is transmitted to said network node, but the condition and action described therein are not transmitted.

2. A method of transmitting a plurality of policy rules according to claim 1, wherein, with regard to the policy rules that depend on a new policy rule or on any of which a new policy rule depends,

detected by said detection step, if the policy rule has not been transmitted to said network node, the identifier thereof, the condition and action described therein, and a first instruction that specifies network interface information on said network node to put the policy rule into action are transmitted to said network node; if the policy rule has been transmitted to said network node, the identifier thereof and a second instruction that specifies network interface information on said network node to put the policy rule into action are transmitted to said network node.

3. A method of transmitting a plurality of policy rules according to claim 1, further comprising the steps of:

retaining the policy rules transmitted to said network node in storage of said policy server; and

checking the transmitted policy rules retained in said storage to see whether the policy rules that depend on a new policy rule or on any of which a new policy rule depends, detected by said detection step, have been transmitted to said network node.

4. A method of transmitting a plurality of policy rules according to claim 1, wherein said step of detecting policy rules that depend on a new policy rule or on any of which a new policy rule depends detects a policy rule that references a variable defined in said newly entered policy rule or a policy rule that defines a variable that is used as a condition in said newly entered policy rule.

5. A method of transmitting a plurality of policy rules according to claim 1, wherein said network node is connected to a proxy server that converts the plurality of policy rules transmitted from said policy server into those in form that they can be executed on said network node and said network node receives the converted rules in this form.

6. A method of transmitting a plurality of policy rules, each of which describes a condition and an action, from a policy server to a network node that is connected to the policy server via a network, the method comprising the steps of:

generating a plurality of policy rules:

assigning the policy rules their identifier;

transmitting part of or all the policy rules with their assigned identifier to said network node;

seeing whether the condition described in a policy rule to be removed is exclusive with the conditions described in said plurality of policy rules when removing at least one of the policy rules transmitted to said network node;

transmitting a request to remove a policy rule with its identifier that is specified by the operator to said network node, provided the condition of the policy rule is exclusive.

7. A method of transmitting a plurality of policy rules from a policy server to a network node that is connected to the policy server via a network, the method comprising the steps of:

transmitting the plurality of policy rules to said network node;

transmitting to said network node a specific code and an instruction that specifies a new variable to override a variable that has been defined or used as a condition in at least one of said transmitted policy rules when updating said variable,

wherein said specific code represents an instruction to copy a policy rule including said variable to change and replace the variable in the thus produced policy rule copy by said new variable.